2011 Redistricting Database – Data Processing Notes

Registration Data

- Content is based on voter registration files posted by the State Board of Elections on January 8th, 2011. This was the first weekly data release that contained the complete voter history for the 2010 General Election.
- Voter records with status values of 'denied' or 'removed' were excluded.
- Voters with registration dates later than October 30th, 2010 were removed, so that only those voters eligible to vote at the time of the 2010 General Election were included.
- Voters with registration dates from October 9th through October 30th were included only if they showed up in the voter history as having voted in the fall 2010 elections, as their eligibility to vote was contingent upon method of registration.

Elections Data

- County-wide vote categories such as 'absentee', 'transfer', and 'provisional' were excluded due to the homogenizing effect on the precinct-level data.

- 2004 and 2006 election returns, available from the State Board of Elections by corresponding precinct identifiers, were disaggregated to the 2000 block level and then brought back up to current elections geography before being integrated with more recent elections data. This was done to translate between different versions of elections tabulation geography. That geography was subject to change up until January 1st, 2008 with the creation of "Voting Tabulation Districts", or VTDs. VTDs are equivalent to the voter precincts as they existed on 1/1/08. Election results are now required to be tabulated by VTD within 60 days following each election.

- The 2000 census block assignments available to convert 2004 and 2006 election returns to current VTD geography included a number of "Combined Reporting Units", or "CRUs". CRUs are combinations of one or more voter precincts. They existed due to limitations placed on allowable boundary features under the 2000 Census Voting District Project. The CRUs have been split out in the 2010 census geography due to a change in boundary designation rules under the 2010 Voting District Project. Votes from the 2004 and 2006 election results in these areas were split out based on a weighting by 2010 voting age population.

County	Combined Reporting Unit
Buncombe	107.1 & Ivy 1
Buncombe	Leicester 2 & Sandy Mush
Buncombe	Riceville 1 & Swannanoa 2
Buncombe	Riceville 2 & Swannanoa 3
Buncombe	Upper Hominy 1 & 3
Caswell	Yanceyville 2 & 4
Cherokee	Brasstown & Murphy South
Cherokee	Hanging Dog & Murphy North
Franklin	Harris East & Harris West
Graham	East Ward & West Ward
New Hanover	Harnett 2 & 8
Swain	Alarka, Almond, Bryson City 1, & Whittier
Transylvania	Balsam Grove & Gloucester
Transylvania	East Fork & Rosman-Eastatoe
Transylvania	Lake Toxaway, Quebec, & Sapphire-Whitewater
Union	22 & 33
Wilkes	Ferguson & Mt. Pleasant

- 2008 and 2010 election results were matched directly with 2010 census VTD geography.

Disaggregation Process:

- Both elections and registration data were disaggregated from the VTD to the census block level. Disaggregation was carried out using a commercially-available utility. VTD-level counts were broken out based on the ratio of block-level voting age population to VTD-level voting age population. Since results are fractional, they are truncated down to the nearest whole person. The remainders for all blocks within a VTD are then added to the highest population block within that VTD.

- For disaggregation purposes, the voter registration data was broken into four separate groups: Party & Race, Ethnicity, Age, and Gender. Because of the way the disaggregation utility works, the totals for each of these groups is consistent at the VTD level, but may not be consistent at the block level. Specifically, groups that finely divide the voters into many fields, such as Party & Race, will end up with more voters assigned to the "truncation correction block" (largest population block within the each VTD) than will categories such as gender, which have fewer fields. Districts which split VTDs will carry any block-level differences to their district-level totals.